Return on Investment Program Funding Application (FY 2003 Request)

I T

P R O J E C T

E V A L U A T I O N

This is an electronic template. Please enter your responses on this document. Only electronic submittals of this template will be accepted. Proposals submitted after the designated due date may not receive funding consideration.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform a final project outcome audit, after implementation, for all Pooled Technology funded projects.

SECTION I: PROPOSAL

Date: July 16, 2001

Agency Name: Iowa Commission of Veterans Affairs

Project Name: Enterprise Inventory and Work Order System

Expenditure Name: Pooled Technology Account

Agency Manager: Susan Donaldson, Information Technology Administrator

Agency Manager Phone Number / E-mail: (641) 753-4477   sdonald@dhs.state.ia.us

Executive Sponsor (Agency Director or Designee): Greg Wright, Business Manager

Request For ROI Application Waiver:

Agencies are required to complete this funding application when requesting funds for any project, any IT expenditure costing over $100,000, or any non-routine IT expenditure. If you feel there is compelling reason to waive this requirement, please provide (in the box provided below) a brief description of the project or expenditure, the budget amount, and a rationale for the waiver request. Until a decision is made regarding your waiver request, it is not necessary to complete any other portion of this application. The ITD Enterprise Quality Assurance Office will convey waiver request decisions within five working days of receipt.

Explanation:

A. Project or Expenditure Rationale

Is this project or expenditure necessary for compliance with a Federal standard, initiative, or statute?   ☐**YES** (If "YES," explain)   ☒ **NO**

Explanation:

Is this project or expenditure required by State statute?   ☐ **YES** (If "YES," explain)   ☒ **NO**

Explanation:

Does this project or expenditure meet a health, safety or security requirement?
☒**YES** (If "YES," explain)   ☐ **NO**

> **Explanation:** One aspect of the system being adopted is the ability to track preventive maintenance on life safety assistive technology equipment. This ability would assure compliance with the JCAHO standard and assure reliability of health related apparatus.

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☒ **YES** (If "YES," explain)   ☐ **NO**

> **Explanation:** Currently, an inventory of equipment, material and supplies is being kept on paper in large notebooks. This project would allow the inventory to be kept electronically, accessed in a timely manner, and would allow reports to be customized and printed for ease of data analysis.

Is this project or expenditure consistent with meeting the goals and objectives of the State's strategic plans?
☒ **YES** (If "YES," explain)   ☐ **NO**

> **Explanation:** The first goal under the heading of health on the Vilsack/Pederson Leadership Agenda is to, "Ensure that all Iowans, particularly those with special needs, have access to quality health care services." This project will contribute to that goal by providing more reliable health assistive supplies and equipment to the residents of the Iowa Veterans Home, all of whom have been determined to have special needs. Caregivers will have access to better quality information in a timely manner.

Is this a "research and development" project or expenditure?   ☐ **YES** (If "YES," explain)   ☒ **NO**

> **Explanation:**

B. Project or Expenditure Summary

1. Provide a pre-project or pre-expenditure (before implementation) <u>and</u> a post-project or post-expenditure (after implementation) description of the impacted system or process. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

> **Response:**
> Pre-project description:
> Currently, a large inventory of supplies and equipment used for health care provision on the care units at the Iowa Veterans Home is kept in large notebooks using paper and pencil. This inventory is not readily accessible, is frequently out of date bacause of the difficulty of keeping entries current, and does not provide an easy method for extraction of information in report format for reporting purposes.
>
> Post-project descripiton:
> One system would be used for agency inventory. An item would be entered when it arrives at the agency and tracked throughout the agency until used, consumed or retired. Reports would be readily available and could be customized to provide appropriate information for the user. A preventive maintenance schedule would be a part of this system so that proof could be provided of maintenance performed on health related equipment.

2. Summarize the extent to which the project or expenditure improves customer service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

> **Response:** Implementation of this system would definitely reduce the hassle factor by allowing instant access of information to staff. It would also provide enhanced service and improved work processes.

3. Identify the main project or expenditure stakeholders and summarize the extent to which each, especially citizens, is impacted. In particular, note if the project or expenditure helps reconnect Iowans to State government.

> **Response:** The main stakeholders in this project are state staff whose work processes would be improved. Indirect stake holders are the residents/patients of the Iowa Veterans Home who would receive better care as a result of more locatable and better serviced equipment. Additional stakeholders include:
>
> Iowa Commission of Veterans Affairs (7)
> Iowa Veterans Home Resident Families and Friends
> Iowa Department of Inspections and Appeals
> Iowa Department of Information Technology
> Iowa Department of Management
> Iowa Department of Human Rights, Division of Persons with Disabilities
> Iowa Department of General Services
> Centers for Medicare and Medicaid Services (CMS, formerly Health Care Financing Administration, HCFA)
> Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
> Occupational Safety and Health Administration (OSHA)
> Siemans Building Technologies
> Datastream

SECTION II: PROJECT ADMINISTRATION

A. Agency Information

1. Project Executive Sponsor Responsibilities: The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

   Response: No response required.

2. Organization Skills:
   a. List the project management skills necessary for successful project implementation
   b. List the project management skills available within the agency
   c. List the source(s) of project management skills lacking within the agency
   d. Summarize relevant agency project management experience and results

   > **Response:**
   > a. Task Identification Skills, Communication Management Skills, Planning Skills, Situational Analysis Skills, Staff Management Skills, Project Control Skills, Business Systems Analysis Skills, Information Technology Services Assessment Skills, Data Entry Skills, Software Implementation Skills.
   > b. All skills are available within the agency.
   > c. No skills for this project are lacking within the agency.
   > d. Implementation of many vendor supported software systems including our medical records system, our Pharmacy system, our time clock system, systems used for Medicare and Medicaid reporting, our employee health and safety software and others in successful use within the agency.

B. Project Information

1. History:
   a. Is this project the first part of a future, larger project? If so, please explain.
   b. Is this project a continuation of a previously begun project? If so, please explain project history, current status, and results.

   > **Response:**
   > a. No
   > b. This project has been preceded by the use of the software in one specific part of the agency. The product has been used successfully by the Maintenance Department for work orders and preventive maintenance for three years. The Maintenance Department recommends its use and the agency specifically wants one product throughout the agency.

2. Expectations: Describe the primary purpose or reason for the project.

   > **Response:** One system would be used for agency inventory. An item would be entered when it arrives at the agency and tracked throughout the agency until used, consumed or retired. Reports would be readily available and could be customized to provide appropriate information for the user. A preventive maintenance schedule would be a part of this system so that proof could be provided of maintenance having been performed on health related equipment.

3.   <u>Measures</u>: Describe the criteria that will be used to determine if the project is successful.

> **Response:**   Criteria for success will be the ease and timeliness of information retrieval, compliance with oversight agency reporting requirements, lower equipment costs resulting from better and more timely maintenance, improved health and safety of residents as well as staff, and fewer reported injuries as a result of broken or malfunctioning equipment.

4.   <u>Environment</u>: List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, etc.).

> **Response:**
> Iowa Commission of Veterans Affairs (7)
> Iowa Veterans Home clinical staff (750)
> Iowa Veterans Home business staff (150)
> Iowa Veterans Home Medicaid program staff (2)
> Iowa Veterans Home Residents/Patients (740)
> Iowa Veterans Home Resident Families and Friends
> Iowa Department of Inspections and Appeals
> Iowa Department of Information Technology
> Iowa Department of Human Rights, Division of Persons with Disabilities
> Iowa Department of General Services
> Centers for Medicare and Medicaid Services (CMS, formerly Health Care Financing Administration, HCFA)
> Joint Commission on Accreditation of Healthcare Ogranizations (JCAHO)
> Occupational Safety and Health Administration (OSHA)
> Siemans Building Technologies
> Datastream

5. <u>Risk:</u> Describe the project risks which may be internal or external to State government, i.e. implementing versus not implementing project, changing technology, potential cost overruns, changing citizen demand or need, etc.

> **Response:** Lack of implementation of this project may mean increased fines by oversight agencies and would almost certainly mean less efficient service provision. If the project is not completed, equipment failures could be more numerous and injuries could result to clinical staff and to residents/patients.

6. <u>Security / Data Integrity / Data Accuracy / Information Privacy</u>
   a. List the security requirements of the project
   b. Describe how the security requirements will be integrated into the project and tested
   c. Describe what measures will be taken to insure data integrity, data accuracy and information privacy.

> **Response:**
> a. It is important that each person with access to the system have access to change only those specific parts directly related to their job duties.
> b. Access to the system will be overseen by a systems administrator whose specific job duties include providing for the security of the system.
> c. Training will be provided to assure that the users have an understanding of the importance of the integrity of the data. Accesses will be granted on a need to know basis. Data integrity will be verified at the point of entry by authorized personnel. Passwords will be required to access the data.

7. <u>Project Schedule</u>
   Describe general time lines, resources, tasks, checkpoints, deliverables, responsible parties, etc.

> **Response:** Due to lack of information regarding funding availability, we have proposed the following non-specific timeline. Responsible parties are Iowa Veterans Home Information Technology staff.
> Month 1 -- Acquisition of software package and begin identification of involved staff
> Month 2 -- Install and test software, begin training staff, determine specific dates for implementation
> Month 3 -- Load data and begin test period with systems running parallel
> Month 4 -- Determine problem areas and troubleshoot/resolve with vendor
> Month 5 -- Continue
> Month 6 -- Go live with new system and continue to monitor closely
> Month 7 -- Implementation complete

SECTION III: TECHNOLOGY **(In written detail, describe the following)**

A. Current Technology Environment
    1. <u>Software (Client Side / Server Side / Midrange / Mainframe):</u>
       a. Application software
       b. Operating system software
       c. Major interfaces to other systems, both internal and external

> **Response:** Client side network software.
>
> a. Microsoft Office, COBOL, INFO
>
> b. Microsoft Windows NT
>
> c. We are currently part of the network of the Department of Human Services. Interfaces to other systems include the federal Veterans Affairs medical record, the state mainframe system, and internally, our Pharmacy system, medical records system, medical information system, and time clock system.

    2. <u>Hardware (Client Side / Server Side / Mid-range / Mainframe):</u>
       a. Platform, operating system
       b. Storage and physical environment
       c. Connectivity and bandwidth
       d. Logical and physical connectivity
       e. Major interfaces to other systems, both internal and external

> **Response:** a. Bull DPX20 Mini-computer running UNIX
> NCR S26XLPII servers running Microsoft Windows NT Server
> Workstations running Windows 98 and Windows NT Client
>   Wild Rose
>   Compaq Deskpro DPENS P400
>   Compaq Deskpro DPEP P550
>
> b. Connection to the Department of Human Services personal computer network provides storage capacity and servers for our networking. We also have access to the state mainframe.
>
> c. Fiber Optic cable connecting 7 main buildings on campus
> Fiber Optic risers to upper floors of 2 buildings with 4 floors
> Category 5 cable from switches to desktops
> Switches
>   Cisco 6509 -- main switch
>   Cisco 2900 series and 3500 series switches
>
> d. We are connected to the statewide network through the ICN on T1 lines.
>
> e. Router
>   Baystack Access Node Communications Server model # AE1001007.

B. Proposed Technology Environment

    1. <u>Software (Client Side / Server side / Mid-range / Mainframe)</u>
       a. Application software

b. Operating system software

c. Major interfaces to other systems, both internal and external

d. General parameters if specific parameters are unknown or to be determined

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Response: All software developed as part of this project will be client side network software.

a. The application software will be Access, SQL, COBOL and possibly Visual Basic software.

b. The operating system software will be Microsoft Windows 2000 on the agency network.

c. Interfaces to other systems will include the Federal Veterans Affairs medical record, and internally, our existing Pharmacy system and our existing medical records system.

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2. <u>Hardware (Client Side / Server Side / Mid-range / Mainframe)</u>
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and Bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external
   f. General parameters if specific parameters are unknown or to be determined

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Response: a. Bull DPX20 Mini-computer running UNIX
Compaq Prolliant servers running Windows 2000 Server
NCR S26XLPII servers running Microsoft Windows NT Server
Workstations running and Windows NT Client and Windows 2000 Client
    Compaq Deskpro DPENS P400
    Compaq Deskpro DPEP P550
    Compaq Deskpro EN CMT PIII/1GHGZ with 256 MB Memory

b. We have a Compaq server rack with 7 servers ncluding a File & Print Server with 68 GB Memory. We also have access to the state mainframe.

c. Fiber Optic cable connecting 7 main buildings on campus
Fiber Optic risers to upper floors of 2 buildings with 4 floors
Category 5 cable from switches to desktops
Switches
    Cisco 6509 -- main switch
    Cisco 2900 series and 3500 series switches

d. We are connected to the statewide network through the ICN on T1 lines.

e. Router
    Baystack Access Node Communications Server model # AE1001007.Compaq Prolliant Servers

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C. Data Elements
If the project creates a new database, provide a description of the data elements.

Response: Global system codes, modules, fields, and security required


SECTION IV: Financial Analysis

A. Budget: Enter figures and calculate (see formula below) Total Annual Prorated Cost (State Share).

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right) \times \%\ State\ Share\right] + \left(Annual\ Ongoing\ Cost \times \%\ State\ Share\right) = Annual\ \Pr orated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$30000	4	100%	$0	0%	$7500
Software	$35000	4	100%	$5000	100%	$13750
Hardware	$0	3	0%	$0	0%	$0
Training	$15000	4	100%	$2000	100%	$5750
Facilities	$0	1	0%	$0	0%	$0
Professional Services	$17000	4	100%	$0	0%	$4250
ITD Services	$0	4	0%	$0	0%	$0
Supplies, Maint, etc.	$0	1	0%	$0	0%	$0
Other (Specify)	$0	1	0%	$0	0%	$0
Totals	$97000	-------	-------	$7000	------	$31250

Transfer this amount to the ROI Financial Worksheet, item "D" on page 13.
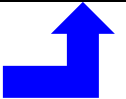
B. Funding: Enter data or provide response as requested

1.   This is (pick one):   ☒ A Pooled Technology Fund or Reengineering Fund Request
                                           ☐ An Agency IT Expenditure or Budget Request (General Fund, Road Funds, etc)
                                         ☐ Other – Specify:

2.   On a fiscal year basis, enter the estimated cost by funding source?

	FY03		FY04		FY05	
	Cost ($)	% Total Cost	Cost ($)	% Total Cost	Cost ($)	% Total Cost
State General Fund	$30000	31%	$0	0%	$0	0%
Pooled Tech. Fund	$67000	69%	$0	0%	$0	0%
Federal Funds	$0	0%	$0	0%	$0	0%
Local Gov. Funds	$0	0%	$0	0%	$0	0%
Grant or Private Funds	$0	0%	$0	0%	$0	0%
Other Funds (Specify)	$0	0%	$0	0%	$0	0%
Total Project Cost	$97000	100%	$0	100%	$0	100%

If applicable, summarize prior fiscal year funding experience for the project / expenditure.

> **Response:**   NA

1.   On a fiscal year basis, how much of the total ($ amount and %) project / expenditure cost would be <u>absorbed</u> by your agency from normal operating budgets (all funding sources)?

> **Response:**
> First year -- $30,000 (31%) -- reallocation of existing staff to implement project

2.   Identify, list, and quantify all <u>new annual ongoing</u> (maintenance, staffing, etc.) related costs (State $s) that will be incurred after implementation or expenditure.

> **Response:**
> $ 2,000   training
> $ 5,000   software maintenance
> $ 7,000 total

C. ROI Financial Worksheet: Respond to the following and transfer data to the ROI Financial Worksheet (see IVC11) as necessary:

1.   Annual Pre-Project Cost – Quantify all <u>actual</u> state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process <u>prior to</u> project implementation. This section should be completed only if state government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response:**   NA

2.   Annual Post-Project Cost – Quantify all <u>estimated</u> State government direct and indirect costs associated with activity, system or process <u>after</u> project implementation. This section should be completed only if State government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response: NA**

3.   State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost." This section should be completed only if State government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response:**   NA

4.   Citizen Benefit – Quantify the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time savings and $.325 per mile for travel cost savings.

> **Response:**   NA

5.   Opportunity Value/Risk or Loss Avoidance Benefit – Quantify the estimated annual <u>non-operations</u> benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

> **Response:**   We estimate that $42,116 will be returned to the State General Fund due to the federal match from Medicaid.

6.   Total Annual Project Benefit -- Add the values of all annual benefit categories.

> **Response:** $42,116

7.   Total Annual Project Cost – It is necessary to <u>estimate and assign</u> a useful life figure to <u>each</u> cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project

elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all <u>new</u> annual ongoing costs that are project related. Completing <u>Section IV-A, Project Budget</u> of the evaluation document will provide all the necessary information for this item.

Response:	$31,250

8. Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

Response:	1.35

9. ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

Response:	16.22

10. Benefits Not Readily Quantifiable -- List the project benefits which are not readily quantifiable (i.e. IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.). Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Readily Quantifiable" box in the applicable row.

Response:
10 Improving work processes for staff
10 Reduced equipment breakdowns and malfunctions
10 Reduced injuries to resident/patients
10 Reduced injuries to staff
8   Improving quality of life for veterans
6   Utilization of new technology

11. ROI Financial Worksheet

IT PROJECT EVALUATION

Annual Pre-Project Cost - How You Perform The Function(s) Now

FTE Cost (salary plus benefits):	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
A. Total Annual Pre-Project Cost:	$

Annual Post-Project Cost – How You Propose to Perform the Function(s)

FTE Cost:	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
B. Total Annual Post-Project Cost:	$
State Government Benefit (= A-B):	$

Annual Benefit Summary

State Government Benefit:	$
Citizen Benefit:	$
Opportunity Value or Risk/Loss Avoidance Benefit:	$42116
C. Total Annual Project Benefit:	$42116
D. Annual Prorated Cost (SECTION IV-A):	$31250
Benefit / Cost Ratio: (C / D) =	1.35
Return On Investment (ROI): (C – D / Requested Project Funds) x 100 =	16.22**%**

☒ **Benefits Not Readily Quantifiable**

Section V: ITC Project Evaluation Criteria

Criteria and Location in Project Evaluation Document	Points
1. Is the project a statutory requirement; legal requirement; federal or state mandate; health, safety or security requirement or issue; and/or required for compliance with the enterprise technology standards? **Location: Section I-A**	**15**
2. Will the project improve customer service? **Location: Section I-B.2**	**15**
3. Does the project have a direct impact on citizens? To what extent does the project help reconnect state government with Iowans? **Location: Section I-B.3**	**10**
4. Does the project provide a sufficient tangible and/or intangible return on investment? Will it generate savings or income? **Location: Section IV-C**	**10**
5. Does the project make use of information technology and its practical application in reengineering traditional government processes consistent with the goals and objectives of the state's strategic plans? **Location: Section I-B.1**	**10**
6. Risk: What are the risks associated with the project? Such risks may include those internal and external to state government, the risk of doing a project, the risk of not doing a project, and the risks associated with changing technologies, potential cost overruns, and changing citizen demands and needs. **Location: Section II-B.5**	**10**
7. Is this funding required to continue a project that was begun prior to the year funding is being requested for and does it have proven past performance? Is the funding part of a multi-year strategy? **Location: Section II-B1, IVB2**	**10**
8. Will the project be for only one agency, multiple agencies, or the state government enterprise? **Location: Section I-B3, IIB4**	**10**
9. Has the applicant maximized their own and other resources in the project? Is alternative funding unavailable for this project? (If no other funding available, project will not be completed without Pooled Technology funding) **Location: Section IV-B.2, IV-B.3**	**5**
10. What is the credibility of the requester based on past performance on other projects? **Location: Section II-A.2.d**	**5**
Total	**100**